

**Product Name:** 

# **Certificate of Analysis**

Print Date: Jul 11th 2018

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Catalog No.: 5767 Batch No.: 1

CAS Number: 1454585-06-8

IUPAC Name: N-((6,7-Difluoro-1*H*-benzo[*d*]imidazol-2-yl)methyl)-9-(3-fluorophenyl)-2-morpholino-9*H*-purin-6-amine

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**SR 3029** 

Batch Molecular Formula:  $C_{23}H_{19}F_3N_8O$ 

Batch Molecular Weight: 480.45

Physical Appearance:Off White solidSolubility:DMSO to 20 mMStorage:Store at +4°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

**TLC:**  $R_f = 0.05$  (Ethyl acetate:Methanol [9:1])

**HPLC:** Shows 99.6% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 57.5 3.99 23.32 Found 57.61 3.97 23.19

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



# **Product Information**

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#### **Description:**

Potent and selective CK1 $\delta$  and CK1 $\epsilon$  inhibitor (IC50 values are 44 and 260 nM, respectively). Exhibits selectivity for CK1 $\delta$  and CK1 $\epsilon$  over a panel of other kinases. Inhibits proliferation of melanoma and breast cancer cell lines in vitro. Also inhibits growth of breast tumor xenografts in mice.

## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>23</sub>H<sub>19</sub>F<sub>3</sub>N<sub>8</sub>O Batch Molecular Weight: 480.45 Physical Appearance: Off White solid

**Minimum Purity: >98%** 

#### **Batch Molecular Structure:**

Storage: Store at +4°C

#### Solubility & Usage Info:

DMSO to 20 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

**Rosenberg** *et al* (2015) Therapeutic targeting of casein kinase  $1\delta$  in breast cancer. Sci.Transl.Med. **7** 318. PMID: 26676609. **Bibian** *et al* (2013) Development of highly selective casein kinase  $1\delta/1\epsilon$  (CK1 $\delta/\epsilon$ ) inhibitors with potent antiproliferative properties. Bioorg.Med.Chem.Lett. **23** 4374. PMID: 23787102.

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